IT Unit 3

Topic 2

# Ch 3, Data Analytics: Drawing Conclusions, Part 2 Alex Hudson

**Data security, 170-175**

1. **Why is data security important to an organisation?** Because it is important for an organisation to keep both their user accounts and details safe, as thee are very important to them and they do not wish for any of their data to be compromised.
2. **Distinguish between deliberate and accidental threats to data:**  Deliberate threats refer to when someone such as a hacker, when they try to gain information and data from a company. An accidental threat refers to when someone by accident, makes a mistake and loses data.

**Physical security**

1. **List ways of physically security data:** Firewall and modem/router. Keeping the data on additional hard drives.

**Software security**

1. **Elaborate under each of the following software security strategies:**
   1. **Use strong passwords:** A strong password with more than 8 characters, mix of upper and lower case and mix of text allows a user to prevent their accounts being compromised.
   2. **Use login passwords:** Accounts, files, applications that make the user enter a password protect these from unwanted users.
   3. **Use biometric identification:** This allows applications to see the users eye, face etc. to do facial recognition to confirm its one of the allowed users.
   4. **Always log out:** This prevents any hackers or unwanted users accessing the computer or files, this will also now require a new user to enter their details and password to gain access.
   5. **Encryption**
      1. **What is public key encryption:** It is a way for a business to encrypt their files/folders, which means they cannot be used or opened unless the user has a key.
      2. **What is PGP?**
   6. **Firewall:** A firewall is both a software and hardware, which allows the network of an organisation to be protected from unwanted users, their data and files are protected from viruses and Trojans.
   7. **Antivirus software**
      1. **What is malware?** A type of deliberate threat which implements itself into the user’s programs and applications and tries to steal their information.
      2. **What is payload?** The actual information or message in transmitted data, as opposed to automatically generated metadata.
   8. **Backup your files:** There are three types of backups, a full backup (which is all of the files/folders that the user wants to back up), differential (which backs up everything edited/changed since the last differential backup) while differential only backs up things on two media sources.